



United States Patent Improvement

Original Patent-Reference 3798925

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Universal Coupling/Universal Joint

Inventor: Donald G. Martus

100 Roy Keaton Rd.

Jumping Branch

West Virginia, 25969

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ABSTRACT

A universal coupling is disclosed which provides articulation or rotary motion in two planes about a single axis of rotation. The coupling/ universal joint improvement includes a housing containing perpendicularly apposed **ball segment and circular segment surfaces** as apposed to **arcuate** bearing surfaces as shown in reference patent No. 3798925. A driven shaft is connected to a bore in an innermost journal member. First **circular segment** bearing surfaces provide a first generally horizontal articulate motion to the shaft. The second **ball segment and circular segment** surface provide a second, generally vertical articulate motion to the shaft. The coupling provides articulation of the shaft so that a point on the axis of the shaft spaced from the coupling/universal joint describes a circular path about the axis upon radial displacement of the shaft centerline at such point. More specifically, the coupling/ universal joint provides articulation or rotary motion in two planes about a single axis of revolution. **The patent improvement provides a generally, substantially larger circular bearing surfaces than the original patent that only has arcuate surfaces. The contact pattern has an elliptical shape as apposed to an arcuate line shape as manufacturing clearances are applied.** All other features or configurations are the same depending upon the particular application as applied.

1 Claim, 1 Drawing

